Behçet disease

Behçet disease is an inflammatory condition that affects many parts of the body. The health problems associated with Behçet disease result from widespread inflammation of blood vessels (vasculitis). This inflammation most commonly affects the mouth, genitals, skin, and eyes.

Painful mouth sores called aphthous ulcers are usually the first sign of Behçet disease. These sores occur on the lips and tongue and inside the cheeks. The ulcers look like common canker sores, and they typically heal within one to two weeks. About 75 percent of all people with Behçet disease develop similar ulcers on the genitals. These ulcers occur most frequently on the scrotum in men and on the labia in women.

Behçet disease can also cause painful bumps and sores on the skin. Most affected individuals develop pus-filled bumps that resemble acne. These bumps can occur anywhere on the body. Some affected people also have red, tender nodules called erythema nodosum. These nodules usually develop on the legs but can also occur on the face, neck, and arms.

An inflammation of the eye called uveitis is found in more than half of people with Behçet disease. Eye problems are more common in younger people with the disease and affect men more often than women. Uveitis can result in blurry vision and an extreme sensitivity to light (photophobia). Rarely, inflammation can also cause eye pain and redness. If untreated, the eye problems associated with Behçet disease can lead to blindness.

Less commonly, Behçet disease can affect the joints, gastrointestinal tract, large blood vessels, and brain and spinal cord (central nervous system). Central nervous system abnormalities are among the most serious complications of Behçet disease. Related symptoms can include headaches, confusion, personality changes, memory loss, impaired speech, and problems with balance and movement.

The signs and symptoms of Behçet disease usually begin in a person's twenties or thirties, although they can appear at any age. Some affected people have relatively mild symptoms that are limited to sores in the mouth and on the genitals. Others have more severe symptoms affecting many parts of the body, including the central nervous system. The features of Behçet disease typically come and go over a period of months or years. In most affected individuals, the health problems associated with this disorder improve with age.

Frequency

Behçet disease is most common in Mediterranean countries, the Middle East, Japan, and other parts of Asia. However, it has been found in populations worldwide.

The highest prevalence of Behçet disease has been reported in Turkey, where the disorder affects up to 420 in 100,000 people. The disorder is much less common in northern European countries and the United States, where it generally affects fewer than 1 in 100,000 people.

Genetic Changes

The cause of Behçet disease is unknown. The condition probably results from a combination of genetic and environmental factors, most of which have not been identified. However, a particular variation in the *HLA-B* gene has been strongly associated with the risk of developing Behçet disease.

The *HLA-B* gene provides instructions for making a protein that plays an important role in the immune system. The *HLA-B* gene is part of a family of genes called the human leukocyte antigen (HLA) complex. The HLA complex helps the immune system distinguish the body's own proteins from proteins made by foreign invaders (such as viruses and bacteria). The *HLA-B* gene has many different normal variations, allowing each person's immune system to react to a wide range of foreign proteins. A variation of the *HLA-B* gene called *HLA-B51* increases the risk of developing Behçet disease. Although many people with Behçet disease have the *HLA-B51* variation, most people with this version of the *HLA-B* gene never develop the disorder. It is unknown how *HLA-B51* increases the risk of developing Behçet disease.

Researchers have considered many other genetic and environmental factors as possible contributors to Behçet disease. Studies have examined several genes related to immune system function, although no gene except *HLA-B* has been definitively associated with an increased risk of Behçet disease. It appears likely that environmental factors, such as certain bacterial or viral infections, play a role in triggering the disease in people who are at risk. However, the influence of genetic and environmental factors on the development of this complex disorder remains unclear.

Inheritance Pattern

Most cases of Behçet disease are sporadic, which means they occur in people with no history of the disorder in their family. A small percentage of all cases have been reported to run in families; however, the condition does not have a clear pattern of inheritance.

Other Names for This Condition

- Adamantiades-Behcet disease
- Behcet disease

- Behcet syndrome
- Behcet triple symptom complex
- Behcet's syndrome
- Old Silk Route disease
- triple symptom complex

Diagnosis & Management

These resources address the diagnosis or management of Behçet disease:

- American Behcet's Disease Association: Diagnosis
 http://www.behcets.com/site/c.8oIJJRPsGcISF/b.9145377/k.ED52/Diagnosis.htm
- American Behcet's Disease Association: Treatments http://www.behcets.com/site/c.8oIJJRPsGcISF/b.9145379/k.FED2/Treatment.htm
- Genetic Testing Registry: Behcet's syndrome https://www.ncbi.nlm.nih.gov/gtr/conditions/C0004943/

These resources from MedlinePlus offer information about the diagnosis and management of various health conditions:

- Diagnostic Tests https://medlineplus.gov/diagnostictests.html
- Drug Therapy https://medlineplus.gov/drugtherapy.html
- Surgery and Rehabilitation https://medlineplus.gov/surgeryandrehabilitation.html
- Genetic Counseling https://medlineplus.gov/geneticcounseling.html
- Palliative Care https://medlineplus.gov/palliativecare.html

Additional Information & Resources

MedlinePlus

- Encyclopedia: Uveitis https://medlineplus.gov/ency/article/001005.htm
- Health Topic: Behcet's Syndrome https://medlineplus.gov/behcetssyndrome.html
- Health Topic: Vasculitis https://medlineplus.gov/vasculitis.html

Genetic and Rare Diseases Information Center

 Behçet disease https://rarediseases.info.nih.gov/diseases/848/behcet-disease

Additional NIH Resources

- National Eye Institute https://nei.nih.gov/health/behcets/
- National Institute of Arthritis and Musculoskeletal and Skin Diseases https://www.niams.nih.gov/Health_Info/Behcets_Disease/
- National Institute of Neurological Disorders and Stroke https://www.ninds.nih.gov/Disorders/All-Disorders/Behcets-Disease-Information-Page

Educational Resources

- Cedars-Sinai Medical Center http://www.cedars-sinai.edu/Patients/Health-Conditions/Behcets-Syndrome.aspx
- Cleveland Clinic http://my.clevelandclinic.org/health/articles/behcets-disease-what-you-need-to-know
- Disease InfoSearch: Behcet's Disease http://www.diseaseinfosearch.org/Behcet's+Disease/780
- Johns Hopkins Vasculitis Center https://www.hopkinsvasculitis.org/types-vasculitis/behcets-disease/
- MalaCards: behcet's disease http://www.malacards.org/card/behcets disease
- Merck Manual Professional Version http://www.merckmanuals.com/professional/musculoskeletal-and-connectivetissue-disorders/vasculitis/beh%C3%A7et-disease
- Orphanet: Behçet disease http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&Expert=117

Patient Support and Advocacy Resources

- American Behcet's Disease Association http://www.behcets.com/site/c.8oIJJRPsGcISF/b.9145371/k.BD9A/Home.htm
- Autoinflammatory Alliance http://autoinflammatory.org/behcets.php

- National Organization for Rare Disorders (NORD) https://rarediseases.org/rare-diseases/behcets-syndrome/
- RareConnect https://www.rareconnect.org/en/community/behcet-s-syndrome

Genetic Testing Registry

 Behcet's syndrome https://www.ncbi.nlm.nih.gov/gtr/conditions/C0004943/

ClinicalTrials.gov

ClinicalTrials.gov
 https://clinicaltrials.gov/ct2/results?cond=%22Behcet+disease%22+OR+%22Behcet+Syndrome%22

Scientific Articles on PubMed

PubMed

https://www.ncbi.nlm.nih.gov/pubmed?term=%28Behcet+Syndrome%5BMAJR %5D%29+AND+%28Behcet%5BTIAB%5D%29+AND+english%5Bla%5D+AND +human%5Bmh%5D+AND+%22last+1800+days%22%5Bdp%5D

OMIM

 BEHCET SYNDROME http://omim.org/entry/109650

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 Free article on PubMed Central: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3867978/

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